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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,862	11/12/2003	Tsutomu Ogihara	035576/271443	6724

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EXAMINER

ZEMEL, IRINA SOPJIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/706,862	Applicant(s) OGIHARA ET AL	
	Examiner Irina S. Zemel	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative under 35 USC 103 (a) as obvious over WO 03/088344 Honeywell International, Inc., (hereinafter "Honeywell").

As discussed in the previous office action, the references discloses nanoporous films obtained from compositions containing siloxane monomer or polymers precursor (see page 13, lines 5-7), and quaternary ammonium compounds such as tetraethyleammonium acetate. Further, the reference discloses, in example 8, polymerizing silanes in the presence of tetramethylammonium acetate (TMAA), and then, forming films by depositing the solution containing polymerized silanes and TMMA onto a wafer and heating the film. This example is devoid of any porogen. After silane condensation, the resulting intermediate solutions inherently contains silane polymer and unreacted TMAA (catalyst), thus fully meeting the limitations of claims 1 and 6. The solution, obviously, may also contain additional components, however those components do not materially affect the properties of the solution (as far as its ability to form a porous film), and, thus, are not excluded by the "consisting essentially" language of the claims.

Since the solutions after the silane condensation reaction contain reasonable appear to contain all of the components claimed in the claims of the instant application,

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it is also reasonable believed that the solutions are inherently capable of forming porous films, and, in fact, do form such films upon coating on the substrate and heating as disclosed in the referenced illustrative example of Honeywell. The burden is shifted to the applicants to provide factual evidence to the contrary.

Further, in respect to claims 6-8, as noted in the previous office action, the claims claim a product obtained by a specified process. As noted above, it is reasonable believed that films obtained in illustrative example 8 are inherently the same as the claimed films. However, it is further believed that the claimed films are similar (not patentable distinct) from the films obtained from solutions containing porogen and removing porogen as discussed in the previous office action. Again, the burden is shifted to the applicants to provide factual evidence to the contrary.

The inventions as claimed, thus, is still considered to be unpatentable over the disclosure of the Honeywell reference.

Response to Arguments

Applicant's arguments filed 4-11-2005 have been fully considered but they are not persuasive. The applicants argue that the claimed invention as amended, excludes the presence of any porogen as required by the Honeywell reference. The applicants attention is drawn to the illustrative example 8, as discussed above. This example does not have any porogen present, and, thus, does not require its removal. However, the films obtained from composition of example 8 and inherently containing some amount of TMAA (note that none of the claims specifies the amount of the claimed ammonium

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salt) do appear to be identical to the claimed films and compositions. As discussed above.

The argument regarding using ammonium salt and not hydroxide is noted, but the argument does not appear to be relevant to the rejection since the vast majority of the illustrative examples of Honeywell, including example 8, utilize a slat, not a hydroxide, thus anticipating the claimed limitation. Simply because the reference discloses other possible catalysts has no bearing on anticipatory rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

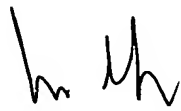
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ISZ



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700